INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR
KHARAGPUR, WEST BENGAL 721302

TENDER DOCUMENT

For

Providing and fixing manual water meter at Kajubagan Complex
(Chitrakut parisar).

NIT No: IW/WW/NIT/2223/020

Tender Serial No. _______________ Issued to:

..........................................................................................
..........................................................................................
..........................................................................................
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1. NOTICE INVITING TENDER

1.1. INTRODUCTION

Indian Institute of Technology (IIT) Kharagpur, hereinafter called IITKGP, invites online tenders from the eligible contractors for Providing and fixing manual water meter at Kajubagan Complex (Chitrakut parisar). Particulars of the project are as following.

1.2. PARTICULARS

<table>
<thead>
<tr>
<th>1. NIT Number</th>
<th>IW/WW/NIT/2223/020</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Name of Work</td>
<td>Providing and fixing manual water meter at Kajubagan Complex (Chitrakut parisar).</td>
</tr>
<tr>
<td>3. Location of Work</td>
<td>Campus IIT Kharagpur</td>
</tr>
<tr>
<td>4. Estimated Cost (including 18% GST)</td>
<td>₹ 4,12,839.00/- (Rupees Four Lakh Twelve Thousand Eight Hundred and Thirty Nine Only).</td>
</tr>
<tr>
<td>5. Earnest Money Deposit</td>
<td>₹ 8,257.00/- (Rupees Eight Thousand Two Hundred and Fifty Seven Only) [Not mandatory for bidders registered under MSE category]</td>
</tr>
<tr>
<td>6. Time Limit for Execution</td>
<td>90 days from Date of Start.</td>
</tr>
<tr>
<td>7. Tender Basis and Mode</td>
<td>Two stage (Technical Bid &amp; Financial Bid)</td>
</tr>
<tr>
<td>8. Mode of Payment to IITKGP (EMD)</td>
<td>i) Original Demand Draft/Pay Order or copy of valid registration certificate under MSE category has to be submitted physically at the office of CE on or before the due date/extended date of submission of bid. &amp; Scanned copy of Demand Draft/Pay Order/Registration under MSE category has to be uploaded on <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> ii) Demand Draft/Pay order to be drawn in favour of IIT Kharagpur payable at Kharagpur.</td>
</tr>
<tr>
<td>9. Date, Time &amp; Venue of Pre-bid Meeting</td>
<td>24th Jan 2023 15:30hrs, CCM Meeting Room, 1st Fl, Old Bldg., IIT Kharagpur, Kharagpur-721302</td>
</tr>
<tr>
<td>10. Closing Date &amp; Time for Receipt of bids</td>
<td>31st Jan 2023upto 15:00hrs</td>
</tr>
<tr>
<td>11. Date &amp; Time for Opening of Technical Bid</td>
<td>01st Feb 2023 at 15:30hrs</td>
</tr>
<tr>
<td>12. Date &amp; Time for Opening of Price Bid</td>
<td>Shall be intimated to the eligible bidders subsequently.</td>
</tr>
<tr>
<td>13. Engineer-in-charge and contact details.</td>
<td>Mr. S.K Biswas, Senior Executive Engineer, Tel: 03222-82621, Email: <a href="mailto:skbiswas@adm.iitkgp.ac.in">skbiswas@adm.iitkgp.ac.in</a></td>
</tr>
<tr>
<td>14. Address for tender issue, submission and opening</td>
<td>Civil Construction and Maintenance Section, 1st Floor, Old Building, IIT Kharagpur, Kharagpur WB 721302</td>
</tr>
<tr>
<td>15. Website for full and updated information</td>
<td><a href="http://www1.iitkgp.ac.in/topfiles/tenders.php">http://www1.iitkgp.ac.in/topfiles/tenders.php</a>; <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a></td>
</tr>
<tr>
<td>16. Website for tender submission &amp; processing</td>
<td><a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a></td>
</tr>
</tbody>
</table>

17. Hard copy submission of Technical Bid Document | Hard copy submission of Technical Bid documents to be submitted at “Civil Construction & Maintenance Section, 1st Floor, Old Building, IIT Kharagpur, Kharagpur WB 721302” on or before 08.02.2023 |
1.3. ELIGIBILITY CRITERIA

1.3.1. The bidder must be registered in appropriate class of works with Government organization like CPWD/ PWD/ MES or PSUs or those having experience in similar nature of works awarded by Government / Semi Government Organizations/ Government Funded Autonomous Organization.

1.3.2. The bidder must have done at least 1 (ONE) similar work of value of 80% of the estimated cost or 2 (TWO) similar works for projects each of value 60% of the estimated cost or 3(THREE) similar work for projects each of value 40% of the estimated cost with Government/ Semi-government/PSU/ Government Funded Autonomous Organization during last 7 (seven) years preceding last date of the month of tender submission.

Note:
(i) The estimated is ₹ 4,12,839.00/- (Rupees Four Lakh Twelve Thousand Eight Hundred and Thirty Nine Only).
(ii) The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to the last date of receipt of applications for tender.
(iii) Similar works shall mean: Repair/Maintenance work related to Water Supply/ Civil Construction and Maintenance work including Plumbing. Works.

1.3.3. The bidder must be registered with appropriate government authority as a bonafide business entity and must have GST registration certificate and Permanent Account Number of income tax.

1.3.4. The registrations and licenses should be valid during the execution phase.

1.3.5. The Average annual turnover of the bidder as per ITCC or profit & loss statement shall not be less than 30% of the estimated cost of project, not having incurred loss in more than two years, during last 5 years ending 31st Mar 2022. The documents submitted should be duly certified and audited by Chartered Accountant

Copy to:
1) Registrar
2) Chief Engineer
3) SE(Civil/E&M)
4) Executive Engineer (Civil/E&M)
5) Engineer (Telephone)
6) Assistant / Junior Engineer (WW)
7) Notice Board
8) Office file

On behalf of the Director, Indian Institute of Technology Kharagpur

[Signature]

Senior Executive Engineer (WW/Civil/SS)
2. INFORMATION TO BIDDERS

2.1 SCOPE OF WORK

2.1.1 The IITKGP intends for "Providing and fixing manual water meter at Kajubagan Complex (Chitrakut Parisar)." The work consists of Providing and fixing manual water meter at water tanks.

2.1.2 Constraint: The job needs to be executed in Campus area IIT Kharagpur without causing any disturbances to the normal functioning of routine activities/road networks.

2.1.3 The vendor shall work out execution sequence and methodology so as to complete the project within the envisaged time and the estimated cost, duly handling the constraint mentioned above.

2.2 GENERAL INSTRUCTIONS

2.2.1 Bidding documents are to be obtained electronically through websites: http://www1.iitkgp.ac.in/topfiles/tenders.php; ii)https://eprocure.gov.in/eprocure/app.

2.2.2 This bid document shall be read in conjunction with GCC (General Conditions of Contract) available on http://www1.iitkgp.ac.in/topfiles/tenders.php.

2.2.3 The bidder shall visit and inspect the site and obtain all information on his own responsibility and at own cost, which may be necessary for the purpose of quoting and submitted the tender. No excuse or ignorance as to site conditions and local information shall be accepted after awarding of the contract. Access to the site will be granted by the Engineer-in-charge on all working days within working hours.

2.2.4 IITKGP shall not provide any space at site for labour huts.

2.2.5 All clarifications about the tender shall be sought by bidder on or before pre-bid meeting. The bidders may make suggestions which shall be considered during the Pre Bid Meeting. Intending bidder(s) may also send their queries or suggestion, if any, through e-mail to the Engineer-in-charge on skbiswas@admin.iitkgp.ac.in on or before 24th Jan 2023, 15:00 hrs. No queries shall be entertained after notification of replies to noteworthy queries received till the date of pre-bid meeting.

2.2.6 Completion certificate issued by Competent Authority will only be considered as credential. If the Completion certificate issued by Competent Authority does not reflect the type of work, then Final bill/Schedule of Quantity of the qualifying works also to be attached along with the Completion certificates. Certificate from private individuals/organizations for whom such works have been executed shall not be accepted.

2.2.7 The bidding document (consisting of specifications, the schedule of quantities of various types of items to be executed, the set of terms and conditions of the contract and other documents/drawings, if any), Addendum/Corrigenda, Clarifications to Pre-bid queries can be downloaded from the websites: i)http://www1.iitkgp.ac.in/topfiles/tenders.php; ii)https://eprocure.gov.in/eprocure/app. Corrigenda, if any shall be published only on these websites at any time before the closing time of tender. The institute shall not be responsible for any delay/difficulties/inaaccessibility of downloading facility for any reason whatsoever. The tenderers who have downloaded the tender documents from website must visit the website and ensure that such addendum(s)/corrigendum(s) (if any) is also downloaded by them. This shall be the responsibility of the prospective registered bidders to check the web site for any such corrigendum/addendum before closing time of tender and ensure that bid submitted by them are in accordance with all the corrigenda/addenda.

2.2.8 All costs, charges & expenses that may be incurred in connection with the preparation of his tender shall be borne by him and the institute accepts no liability whatsoever therefore.

2.2.9 Rates quoted by the bidders (In the uploaded Excel Template having form of contract as "Percentage") shall be inclusive of GST (Goods and Services Tax - Central, State and Interstate) and all applicable taxes. Income Tax and all other statutory deductions like labour cess etc. will be deducted from the bill as per prevailing rules.

2.2.10 Exemption to IITKGP against any tax/duty/fee/surcharges/charge/cost, if any, found applicable or sought later from IITKGP after award shall be passed on to IITKGP by the contractor without dispute.

2.2.11 IITKGP reserves the right to reject any or all of the bids without assigning any reason.

2.2.12 Bid Validity: Bid shall remain valid for 120 days from the date of submission.

2.2.13 Firm Price: Bidder's quoted Rates/Prices for executing the activities under the Contract shall remain firm till completion of the entire work & shall not attract any escalation under any circumstances whatsoever.

2.2.14 If any information furnished by the bidder is found as false/fabricated, then his bid will be rejected and treated as cancelled. Even if such manipulation is detected at any stage after signing of the contract, it would lead to termination of the contract besides forfeiture of Earnest Money Deposit and liabilities towards prosecution. In such cases the bidder will be debarred from participation in future tendering process in IITKGP for next 01 (One) year.
2.2.15 Earnest Money Deposit (EMD) of requisite amount and that in prescribed mode or proof of payment thereof shall be submitted with the Technical Bid explained in following section.

2.2.16 Exemption from EMD: MSEs registration with District Industries Centre, National Small Industries Corporate and other body specified by Ministry of MSME or Startups as recognized by Department of Industrial Policy and Promotion shall be exempted from payment of EMD in the bid. The self-attested photocopy of their evidence should be submitted by the bidder (s) along with the format requested letter for exemption.

i). In case the NSIC/MSEs registration certificate is found invalid during evaluation, the bid of such bidder shall be rejected.

ii). Bidder so exempted for submission of EMD shall have to submit an undertaking as per Annexure-II

iii). Bidder not having NSIC/MSEs registration has to submit EMD along with an undertaking as per Annexure II

2.2.17 Refund / Conversion of Earnest Money Deposit: The Earnest Money received shall be refunded to the unsuccessful bidders without any interest upon executing the Contract Agreement by successful bidder. The Earnest Money Deposit of successful bidder shall be retained and converted into part of Security Deposit.

2.2.18 Forfeiture of Earnest Money Deposit: Earnest Money Deposit will be forfeited in any of the following cases:

2.2.18.1 The bidder withdraws / modifies his tender during the period of Bid Validity.

2.2.18.2 The bidder, in case of tie between lowest bids, refuse to submit revised offer.

2.2.18.3 The bidder does not accept the correction of arithmetical errors of his tender.

2.2.18.4 The bidder fails to deposit Performance Guarantee and information as per format given in GCC within the stipulated time period before award of the work.

2.3 SUBMISSION OF TENDER

2.3.1 Help for Contractors, FAQ, Information about DSC and Bidders Manual Kit containing the detailed guidelines for e-Procurement system are also available on Central Public Procurement Portal. [(https://eprocure.gov.in/eprocure/app)]

2.3.2 It is mandatory for all the bidders to have a valid Class-II/Class-III Digital Signature Certificate (in the name of person having power of attorney to sign the Bid) from any of the licensed Certifying Agency (Bidders can see the list of licensed CA’s from the link [www.cca.gov.in](http://www.cca.gov.in)) to participate in e-Procurement of IIT KHARAGPUR.

2.3.3 It is mandatory for the bidders to get their firm/company registered with IIT Kharagpur as well as with e-procurement portal to have Vendor Code, User ID & Password. You may follow the below mentioned links

For IIT Kharagpur: [https://erp.iiitkgp.ac.in/SupplierFacilities/login.htm](https://erp.iiitkgp.ac.in/SupplierFacilities/login.htm)

For e-procurement portal: [https://eprocure.gov.in/eprocure/app](https://eprocure.gov.in/eprocure/app) [https://eprocure.gov.in/eprocure/app](https://eprocure.gov.in/eprocure/app)

IIT Kgp shall not be liable for delay in processing or non-processing of the payment or refund in the absence of Vendor Code registration.

2.3.4 Tender documents will be available online on website [https://eprocure.gov.in/eprocure/app](https://eprocure.gov.in/eprocure/app) which can be downloaded free of cost.

2.3.5 Bidders may download and refer the “Instructions for Online Bid Submission” from [https://eprocure.gov.in/eprocure/app?sessionid=2A56E178EED5C7DB8536175EF8B573C9F.eproc.jsp?page=HelpForContractors&service=page](https://eprocure.gov.in/eprocure/app?sessionid=2A56E178EED5C7DB8536175EF8B573C9F.eproc.jsp?page=HelpForContractors&service=page).

2.3.6 The tender documents shall be submitted online in the prescribed format given on the websites and technical bids received online shall be opened as per NIT or Corrigendum thereof. No other mode of submission is acceptable. Detailed credentials as per the requirement of eligibility criteria and all tender papers except Bill of Quantities are to be submitted in “Technical Bid”.

Bill of Quantities with rates duly filled in are to be submitted in the format provided online in the name of “Financial Bid Representative of the bidder, who chooses to attend, may attend the online opening of the technical bids on the scheduled date and time of Bid Opening. However, such representatives shall be allowed to attend the opening of the Technical Bids, only, if such person presents the letter of authority issued in his name by the bidder on his letter head.

2.3.7 Bidders cannot submit the tender after the due date and time of e-bid submission. Time being displayed on Central Public Procurement Portal [https://eprocure.gov.in/eprocure/app("Server System Clock Time")] shall be final and binding on the bidder. e-Bids are required to be submitted by bidders, only as per the Indian Standard Time (IST) and not the time as per their location/country.

2.3.8 The bidders are advised to submit their e-bids well before the e-bid due date. IIT KHARAGPUR shall not be responsible for any delay in submission of e-bids for any reason including server and technical problems.

2.3.9 The Technical and Financial Bid shall be digitally signed by the Authorized Signatory of the bidder & submitted “on-line” only. However hard copy of Technical Bid Document shall be submitted in a sealed envelope super scribed
2.3.10 Any tender received without original Earnest Money in the form as specified in clause 1.2.5 of tender documents shall not be considered and shall be summarily rejected.

2.3.11 IIT KHARAGPUR reserves the right to cancel the tenders before submission/opening of tenders, postpone the tender submission/opening date and to accept/reject any or all tenders without assigning any reasons thereof. IIT KHARAGPUR’s assessment of suitability as per eligibility criteria shall be final and binding.

2.3.12 Tenderers may note that they are liable to be disqualified at any time during tendering process in case any of the information furnished by them is not found to be true. The decision of IIT KHARAGPUR in this regard shall be final and binding. Document uploaded by the Bidders must be readable.

2.3.13 The EMDs shall be received at the Civil Construction and Maintenance Section, 1st Floor, Old Building, IIT Kharagpur, Kharagpur WB 721302, up to 15:00hrs 31st Jan 2023 or Corrigenda otherwise.

2.3.14 EMDs shall be submitted in an envelope super scribed “Providing and fixing manual water meter at Kajubagan Complex (Chitrakut Parisar)” with the NIT NO: IW/WW/NIT/2223/020

2.4 EVALUATION OF BIDS AND AWARD OF WORK

2.4.1 The Bid of bidder will be opened electronically on the specified date and time of opening at the Office of CE, 1st Floor, Old Building, IIT Kharagpur, Kharagpur WB 721302 in the presence of willing bidders or their authorized representatives.

2.4.2 Date, time and place of opening of Financial Bid will be informed after evaluation of Technical Bid to the Technically Qualified Bidders.

2.4.3 Bids shall, first, be checked for payment of Earnest Money Deposit. Only those bids found to have duly paid/ submitted Earnest Money Deposit shall be considered for evaluation.

2.4.4 Evaluation of Technical Bid: The bids received will then be assessed on the eligibility criteria mentioned at Para 1.3 of Notice Inviting Tender. Bids found not meeting the eligibility criteria shall be considered non-responsive and shall be rejected summarily.

2.4.5 IITKGP retains the right to revert back to individual bidders with further clarifications / queries on the Technical Bid. The bidder has to respond to the queries within the specified time mentioned in the covering letter.

2.4.6 Date & time for opening of Financial Bid: The Financial bid or the Revised Financial Bids as the case may be will be opened on specified date and time, which will be intimated to the technically qualified bidders.

2.4.7 EVALUATION OF Financial Bids: The Financial Bid should contain the complete bid document with duly filled in Schedule of Financial Quote. Financial Bids opened as above will be checked for arithmetical errors.

2.4.8 The successful bidder shall be issued Letter of Acceptance (LOA) of the bid, and be required to furnish a Performance Guarantee as per General Conditions of Contract, Program Schedule with specific Milestones to be achieved as to complete the work within the stipulated time limit and details of his Technical Staff to be deployed as per ANNEXURE-I

2.4.9 Letter of Award shall be issued to the successful bidder. The Work Order will be issued only after receipt of the Performance Guarantee, along with Program Schedule and the details of Technical Staff to be deployed for the work.

2.4.10 Agreement (Contract) consisting of complete tender document including conditions, bill of quantities, technical proposal and specialized services, drawings, if any, and acceptance thereof together with any correspondence leading thereto, shall be drawn and signed with the awardee after issue of Work Order.

2.4.11 Date of start of work shall be reckoned from 7th day from the date of issue of “Letter of Acceptance”.
3. UNDERTAKING BY THE BIDDER

UNDERTAKING

I / We have read and examined the Tender document including terms & conditions, specifications, bill of quantities, drawings and designs, general rules & directions, General Conditions of Contract, Special Conditions of Contract and all relevant other documents, publications and rules referred to in the Conditions of Contract and all other contents in the tender documents for the work.

I / We, hereby tender for execution of the work specified for the Indian Institute of Technology Kharagpur within the time specified and in accordance in all respects with the specifications, designs, drawings and instructions in writing.

We agree to keep the tender open for 120 days from the last date of its submission and not to make any modifications in its terms and conditions. A sum of Rs. ___________ has been deposited in cash/ demand draft of a scheduled bank as earnest money. If I / we, fail to furnish the prescribed performance guarantee within prescribed period, I / we agree that the said Director, Indian Institute of Technology Kharagpur or his authorized officer shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I / we fail to commence work as specified, I / we agree that the Director, Indian Institute of Technology Kharagpur shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein.

Further, I / We agree that in case of forfeiture of earnest money or both Earnest Money & Performance Guarantee as aforesaid, I / We shall be debarred for participation in the re-tendering process of the work.

I / We hereby declare that I / We shall treat the tender documents, drawings and other records connected with the work as secret / confidential documents and shall not communicate information derived there-from to any person other than a person to whom I / We am / are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Seal & Signature of Contractor
Postal Address

Dated

Witness

Address

Occupation
# TECHNICAL STAFF OF CONTRACTOR

<table>
<thead>
<tr>
<th>DISCIPLINE</th>
<th>NAME</th>
<th>QUALIFICATION</th>
<th>EXPERIENCE</th>
<th>CONTACT NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall In-charge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Seal & Signature of Contractor
UNDEARTAKING FOR GCC COMPLIANCE

UNDEARTAKING

We hereby undertake that we shall fulfill all the terms & conditions of G.C.C. of IIT Kharagpur within the specified time frame, after the acceptance of our offer in case our offer is accepted; failing which IIT KHRAGPUR may go ahead to take necessary action such as reporting the non-compliance to appropriate Government authorities and barring us from future participation in IIT KHRAGPUR works.

Seal & Signature of Contractor

DATED:
**TO WHOM IT MAY CONCERN**

This is to certify that the total turnover and Profit/Loss summary of M/s ................. having its registered office at .......................................................... for last five Financial years are as given below:

<table>
<thead>
<tr>
<th>Description</th>
<th>Financial years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Turnover from Operations</td>
<td></td>
</tr>
<tr>
<td>Profit (+)/Loss (-) After Tax</td>
<td></td>
</tr>
</tbody>
</table>

The above is true to the best of our knowledge and belief.

(TO BE VERIFIED BY Chartered Accountants)
4. Checklist for Documents to be uploaded on [https://eprocure.gov.in/eprocure/bpp](https://eprocure.gov.in/eprocure/bpp)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Documents</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tender Documents</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>EMD</td>
<td>1.2.5</td>
</tr>
<tr>
<td>3.</td>
<td>Document support of Bonafide Business Entity</td>
<td>1.3.3</td>
</tr>
<tr>
<td>4.</td>
<td>GST Registration Certificate</td>
<td>1.3.3</td>
</tr>
<tr>
<td>5.</td>
<td>Permanent Account Number</td>
<td>1.3.3</td>
</tr>
<tr>
<td>6.</td>
<td>Average annual turnover of the bidder as per ITCC or profit and loss statement for last 5 years</td>
<td>1.3.5</td>
</tr>
<tr>
<td>7.</td>
<td>Experience Certificate</td>
<td>1.3.2</td>
</tr>
<tr>
<td>8.</td>
<td>ANNEXURES-I, II and III</td>
<td>Page No-8-10</td>
</tr>
<tr>
<td>9.</td>
<td>SOQ</td>
<td>Page No-12-13</td>
</tr>
<tr>
<td>S.No</td>
<td>Description of Item</td>
<td>Unit</td>
</tr>
<tr>
<td>------</td>
<td>---------------------</td>
<td>------</td>
</tr>
<tr>
<td>1</td>
<td>20 mm cement plaster of mix 1:6 (1 cement: 6 coarse sand)</td>
<td>sqm</td>
</tr>
<tr>
<td>2</td>
<td>Neat cement punning.</td>
<td>sqm</td>
</tr>
<tr>
<td>3</td>
<td>Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge. Nominal concrete 1:4:8 or leaner mix (I/c equivalent design mix)</td>
<td>cum</td>
</tr>
<tr>
<td>4</td>
<td>Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. In cement mortar</td>
<td>cum</td>
</tr>
<tr>
<td>5</td>
<td>Cutting holes up to 30x30 cm in walls including making good the same; With common burnt clay F.P.S. (non modular) bricks</td>
<td>each</td>
</tr>
<tr>
<td>6</td>
<td>Making chases up to 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.</td>
<td>metre</td>
</tr>
<tr>
<td>7</td>
<td>Labour for dismantling G.I./ P.V.C Pipe with fittings carefully including removing to any distance and stackingpipe with fittings.</td>
<td>Mtr</td>
</tr>
<tr>
<td>8</td>
<td>Refixing of G.I. Pipe with fitting after cleaning interior wall including mending good damages including cost of jointing materials where necessary</td>
<td>Mtr</td>
</tr>
<tr>
<td>9</td>
<td>Supplying, fitting and fixing PVC pipes (Schedule-40) of (medium duty) conforming to ASTM - 1785 and threaded to match with GI Pipes as per IS : 1239 (Part - I). with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbow, nipple, longscrew, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, making threads,fitting, fixing etc. complete in all respect including cost of all necessary fittings as required,jointing materials like teflon, solvent cement etc. in any position above ground. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accessories, specials.) For Exposed Work</td>
<td>Mtr</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mtr</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mtr</td>
</tr>
<tr>
<td>10</td>
<td>Providing, fitting, fixing poly fittings including cost of jointing materials</td>
<td>Mtr</td>
</tr>
<tr>
<td>(i)</td>
<td>Coupling</td>
<td>Nos</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nos</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nos</td>
</tr>
<tr>
<td>(ii)</td>
<td>Tee</td>
<td>Nos</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nos</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nos</td>
</tr>
</tbody>
</table>
### (iii) Reducing Tee

<table>
<thead>
<tr>
<th>Description</th>
<th>Nos</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>a 30 mm dia</td>
<td>18</td>
<td>₹ 194.26</td>
<td>₹ 3,496.74</td>
</tr>
<tr>
<td>b 50 mm dia</td>
<td>18</td>
<td>₹ 227.83</td>
<td>₹ 4,097.41</td>
</tr>
</tbody>
</table>

### (iv) Elbow

<table>
<thead>
<tr>
<th>Description</th>
<th>Nos</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>a 25 mm dia</td>
<td>15</td>
<td>₹ 40.52</td>
<td>₹ 607.82</td>
</tr>
<tr>
<td>b 40 mm dia</td>
<td>36</td>
<td>₹ 94.15</td>
<td>₹ 3,389.48</td>
</tr>
<tr>
<td>c 50 mm dia</td>
<td>15</td>
<td>₹ 134.67</td>
<td>₹ 2,020.10</td>
</tr>
</tbody>
</table>

### (v) Male-Female Adapter

<table>
<thead>
<tr>
<th>Description</th>
<th>Nos</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>a 40 mm dia</td>
<td>36</td>
<td>₹ 81.04</td>
<td>₹ 2,917.53</td>
</tr>
<tr>
<td>b 50 mm dia</td>
<td>20</td>
<td>₹ 112.03</td>
<td>₹ 2,240.56</td>
</tr>
</tbody>
</table>

### (vi) Union

<table>
<thead>
<tr>
<th>Description</th>
<th>Each</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>a 40 mm nominal bore</td>
<td>36</td>
<td>₹ 157.32</td>
<td>₹ 5,663.43</td>
</tr>
<tr>
<td>b 50 mm nominal bore</td>
<td>20</td>
<td>₹ 190.69</td>
<td>₹ 3,813.76</td>
</tr>
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</table>

### (vii) Reducing Socket

<table>
<thead>
<tr>
<th>Description</th>
<th>Each</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>a 40 X 25 mm dia</td>
<td>36</td>
<td>₹ 96.54</td>
<td>₹ 3,475.29</td>
</tr>
<tr>
<td>b 50 X 40 mm dia</td>
<td>36</td>
<td>₹ 90.58</td>
<td>₹ 3,260.76</td>
</tr>
</tbody>
</table>

12 Supplying, fitting and fixing Poly Ball Valve

<table>
<thead>
<tr>
<th>Description</th>
<th>Nos</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>a 40 mm dia</td>
<td>63</td>
<td>₹ 659.07</td>
<td>₹ 41,521.12</td>
</tr>
<tr>
<td>b 50 mm dia</td>
<td>15</td>
<td>₹ 1,344.35</td>
<td>₹ 20,165.26</td>
</tr>
</tbody>
</table>

13 Supply of Water Meter Multi Jet Domestic Type Mechanical Driven Class - A Flanged Ends. Type

<table>
<thead>
<tr>
<th>Description</th>
<th>Nos</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 mm dia</td>
<td>36</td>
<td>₹ 4,349.88</td>
<td>₹ 1,56,595.88</td>
</tr>
</tbody>
</table>

14 Fixing water meter and stop cock in G.I. pipe line including cutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock to be paid separately).

<table>
<thead>
<tr>
<th>Description</th>
<th>Each</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>₹ 606.55</td>
<td>₹ 21,835.80</td>
<td></td>
</tr>
</tbody>
</table>

15 Dismantling ball cock and refixing the same after repair including straightening lever and renewing split pin.

<table>
<thead>
<tr>
<th>Description</th>
<th>Nos</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 mm dia</td>
<td>36</td>
<td>₹ 53.63</td>
<td>₹ 1,930.72</td>
</tr>
</tbody>
</table>

16 Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated aluminium rod with plastic ball.

<table>
<thead>
<tr>
<th>Description</th>
<th>Each</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 mm nominal bore</td>
<td>36</td>
<td>₹ 728.50</td>
<td>₹ 26,226.00</td>
</tr>
</tbody>
</table>

Say Rs= ₹ 4,12,839.00